CLAIMS:

1. A method comprising:

comparing information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations; and

identifying a subset of the combinations of electrodes based on the comparison.

- 2. The method of claim 1, further comprising receiving at least some of the filter information from a user.
- 3. The method of claim 1, further comprising: receiving information describing a configuration of the set of electrodes from a user; and determining at least some of the filter information based on the configuration.
- 4. The method of claim 1, wherein the filter information identifies a number of electrodes for valid electrode combinations.
- 5. The method of claim 1, wherein the filter information identifies a fixed polarity of one of the electrodes of the electrode set for valid electrode combinations.
- 6. The method of claim 1, wherein the filter information identifies a relational characteristic of electrodes within a valid combination of electrodes.
- 7. The method of claim 1, wherein information that identifies a combination of electrodes includes information that identifies at least two active electrodes from the set and the polarities of the identified active electrodes.

8. The method of claim 1, further comprising receiving information that describes a configuration of the set of electrodes from a user, wherein comparing information that identifies combinations of electrodes to filter information comprises:

iteratively generating information that identifies combinations of electrodes based on the configuration information; and

comparing the information generated for each of the combinations to the filter information.

9. The method of claim 8, wherein iteratively generating information that identifies combinations of electrodes comprises:

identifying a first valid combination of electrodes based on the filter information; and beginning the iterative generation of information that identifies combinations of electrodes at the first valid combination of electrodes.

- 10. The method of claim 1, further comprising presenting a list of the combinations of electrodes within the subset to a user.
- 11. The method of claim 10, wherein the combinations of electrodes within the subset are presented to the user in a random order.
- 12. The method of claim 10, wherein the user is a clinician.
- 13. The method of claim 1, further comprising sequentially configuring the electrodes within the set of electrodes according to the combinations of electrodes within the subset for testing of the combinations of electrodes within the subset on a patient.
- 14. The method of claim 13, wherein sequentially configuring the electrodes of the set of electrodes comprises sequentially configuring the electrodes of the set of electrodes according to a randomized ordering of the combinations of electrodes within the subset.

- 16. The method of claim 1, wherein the set of electrodes is implanted within a patient.
- 17. A computer-readable medium comprising instructions that cause a programmable processor to:

compare information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations; and

identify a subset of the combinations of electrodes based on the comparison.

- 18. The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to receive at least some of the filter information from a user.
- 19. The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to:

receive information describing a configuration of the set of electrodes from a user; and

determine at least some of the filter information based on the configuration.

- 20. The computer-readable medium of claim 17, wherein the filter information identifies a number of electrodes for valid electrode combinations.
- 21. The computer-readable medium of claim 17, wherein the filter information identifies a fixed polarity of one of the electrodes of the electrode set for valid electrode combinations.
- 22. The computer-readable medium of claim 17, wherein the filter information identifies a relational characteristic of electrodes within a valid combination of electrodes.

- 23. The computer-readable medium of claim 17, wherein information that identifies a combination of electrodes includes information that identifies at least two active electrodes from the set, and the polarities of the identified active electrodes.
- 24. The computer-readable medium of claim 17, further comprising receiving information that describes a configuration of the set of electrodes from a user, wherein the instructions that cause a programmable processor to compare information that identifies combinations of electrodes to filter information comprise instructions that cause a programmable processor to:

iteratively generate information that identifies combinations of electrodes based on the configuration information; and

compare the information generated for each of the combinations to the filter information.

25. The computer-readable medium of claim 24, wherein the instructions that cause a programmable processor to iteratively generate information that identifies combinations of electrodes comprise instructions that cause a programmable processor to:

identify a first valid combination of electrodes based on the filter information; and begin the iterative generation of information that identifies combinations of electrodes with the first valid combination of electrodes.

- 26. The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to present a list of the combinations of electrodes within the subset to a user.
- 27. The computer-readable medium of claim 26, wherein the combinations of electrodes within the subset are presented to the user in a random order.
- 28. The computer-readable medium of claim 26, wherein the user is a clinician.

Docket No.: 1023-229US01 / P-11557.00

29. The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to sequentially configure the electrodes within the set of electrodes according to the combinations of electrodes within the subset for testing of the combinations of electrodes within the subset on a patient.

- 30. The computer-readable medium of claim 29, wherein the instructions that cause a programmable processor to sequentially configure the electrodes of the set of electrodes comprise instructions that cause a programmable processor to sequentially configure the electrodes of the set of electrodes according to a randomized ordering of the combinations of electrodes within the subset.
- 31. The computer-readable medium of claim 17, further comprising instructions that cause a programmable processor to store the filter information as a description of the subset of combinations of electrodes.
- 32. The computer-readable medium of claim 17, wherein the set of electrodes in implanted within a patient.
- 33. A device comprising:
 - a user interface; and
- a processor to compare information that identifies combinations of electrodes from within a set of electrodes to filter information that relates to at least one characteristic of valid electrode combinations, and identify a subset of the combinations of electrodes based on the comparison, wherein the processor receives at least some of the filter information from a user via the user interface.
- 34. The device of claim 33, wherein the processor receives information describing a configuration of the set of electrodes from the user via the user interface, and determines at least some of the filter information based on the configuration.

- 35. The device of claim 33, wherein the filter information identifies a number of electrodes for valid electrode combinations.
- 36. The device of claim 33, wherein the filter information identifies a fixed polarity of one of the electrodes of the electrode set for valid electrode combinations.
- 37. The device of claim 33, wherein the filter information identifies a relational characteristic of electrodes within a valid combination of electrodes.
- 38. The device of claim 33, wherein information that identifies a combination of electrodes includes information that identifies at least two active electrodes from the set and the polarities of the identified active electrodes.
- 39. The device of claim 33, wherein the processor receives information describing a configuration of the set of electrodes from the user via the user interface, iteratively generates information that identifies combinations of electrodes based on the configuration information, and compares the information generated for each of the combinations to the filter information.
- 40. The device of claim 39, wherein processor identifies a first valid combination of electrodes based on the filter information, and begins the iterative generation of information that identifies combinations of electrodes at the first valid combination of electrodes.
- 41. The device of claim 33, wherein the processor presents a list of the combinations of electrodes within the subset to the user via the user interface.
- 42. The device of claim 41, wherein the processor presents the combinations of electrodes within the subset to the user in a random order within the list.

- 43. The device of claim 33, further comprising a telemetry circuit to communicate with an implantable medical device, the implantable medical device coupled to the electrode set via at least one lead, wherein the processor directs the implantable medical device to sequentially configure the electrodes within the set of electrodes according to the combinations of electrodes within the subset via the telemetry circuit for testing of the combinations of electrodes within the subset on a patient.
- 44. The device of claim 43, wherein the processor directs the implantable medical device to sequentially configure the electrodes of the set of electrodes according to a randomized ordering of the combinations of electrodes within the subset.
- 45. The device of claim 33, further comprising a memory to store the filter information as a description of the subset of combinations of electrodes.
- 46. The device of claim 33, wherein the user is a clinician.
- 47. The device of claim 33, wherein the device comprises a programming device.
- 48. The device of claim 33, wherein the device comprises a handheld computer.
- 49. The device of claim 33, wherein the user interface comprises at least one of a keypad, a display, a pointing device, and a touch-screen.
- 50. The device of claim 33, wherein the set of electrodes is implanted within a patient.